

ABSTRACT

The present invention is directed to a nanotube coated with diamond or diamond-like carbon, a field emitter cathode comprising same, and a field emitter comprising the cathode. It is also directed to a method of preventing the evaporation of carbon from a field emitter comprising a cathode comprised of nanotubes by coating the
5 nanotube with diamond or diamond-like carbon. In another aspect, the present invention is directed to a method of preventing the evaporation of carbon from an electron field emitter comprising a cathode comprised of nanotubes, which method comprises coating the nanotubes with diamond or diamond-like carbon.